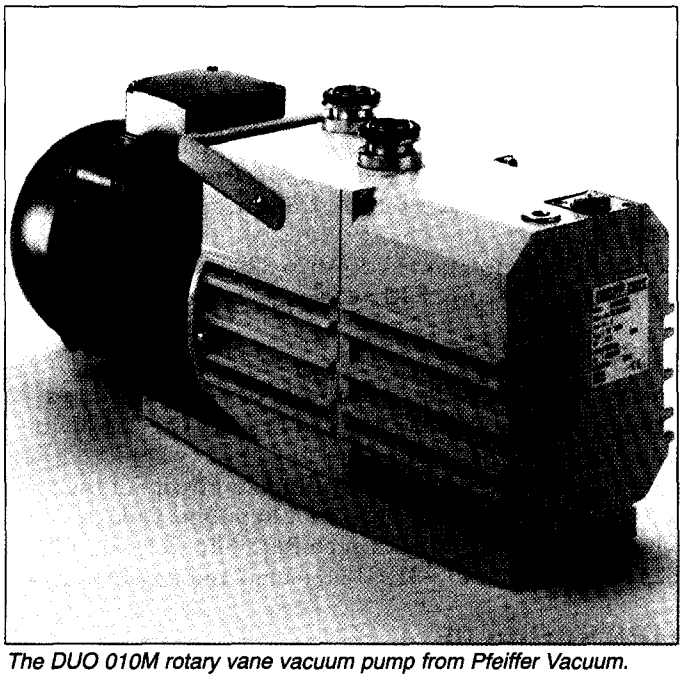
Magnetic coupling maximizes uptime for vacuum pump

The rotary vane DUO 010M is the first vacuum pump to feature an integrated magnetic coupling drive between motor and pump, claims Pfeiffer Vacuum. Oil leaks are eliminated, maintenance is minimized by the absence of radial shaft seals and the wear-free magnetic coupling gives the pump an exceptionally high mean time to failure, says the company.

The innovative drive ensures the DUP 010M is hermetically sealed, with a low leak rate of 1×10^{-5} mbar ls^{-1}. The integral high vacuum safety valve guarantees the integrity of the vacuum process. The pump has a high pumping speed of 10 m^3h^{-1} and is suitable for rough and medium vacuum applications, for example as a backing pump to turbomolecular and diffusion pumps.

The DUO 010M is compact in size and has a noise level of less than 55 dB. It is supplied with two wide voltage motor variants and a range of accessories for monitoring and system integration.

Pfeiffer Vacuum Ltd, tel/fax: +44 (0)1908 373333/377776.



The DUO 010M rotary vane vacuum pump from Pfeiffer Vacuum.

Electrometer for high resistance measurements

The Keithley 6517A electrometer for measurements on high-resistivity materials.

The 6517A electrometer/high resistance meter provides previously unattainable accuracy, sensitivity and speed for high resistance measurements, says Keithley Instruments.

The key feature is the addition of a voltage (polarity) reversal method to eliminate the problems of background current and drift, which reduce the repeatability and accuracy of resistance measurements on high resistivity materials. Additional features include high resistance measurements up to 10^{17} ohms.

The 6517A is well-suited for measuring the resistance, resistivity and conductance of insulating materials, for testing the surface insulation resistance of PCB materials, and determining the leakage of diodes and capacitors, says the company. It was designed for demanding applications in production testing and research in such areas as physics, optics and materials science.

Because temperature and humidity have a significant effect on resistivity, the instrument comes with a built-in type K thermocouple and Keithley offers an optional relative humidity probe (6517A-RH). The instrument can be operated manually or controlled via a built-in IEEE-488 interface from a remote computer. Existing elecrometers can be upgraded to the model 6517A with minimal software alterations for instrument control.

Keithley Instruments Ltd, tel/fax: +44 (0)118 9575666/9596469.

Leak detector doubles throughput

The MS-50 dual port leak detector doubles leak testing throughput, says Vecco Instruments. The dual port design allows one part to be tested on the first port while the user is setting up another part on the second.

The leak detector is designed for use in a broad range of manufacturing environments, including semiconductor and electronics applications. It employs a dual sector mass spectrometer, providing the highest resolution and greatest accuracy in the industry, claims Vecco.

Three operating modes are available: gross, fine and automatic leak testing. A direct flow mode provides greater sensitivity, while a reverse flow mode allows faster cycle times. The MS-50 dual port system features fully automatic start-up, tuning and calibration, and up to 50 preprogrammed test recipes can be stored for easy recall.

Fran Brennen, tel/fax: +1 516 349 8300/8321.